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ABSTRACT

The purpose of this study was to examine ways in which students can become academically engaged and satisfied with their academic experience. A correlational study, using the survey method, was used to describe in quantitative terms, the degree of the relationships between student diligence, student support systems, other related factors, and student academic performance. Diligence scores were collected from 458 students with diligence support scores collected from 358 parents and 34 educators in the public education system. Of these students, 310 were matched with their parents to determine a direct relationship between parental diligence support and student diligence. There was a significant correlation between student diligence and academic performance, especially for younger students. Parental diligence support significantly correlated with student diligence. Implications for the education system are discussed. (Contains 30 references.) (SLD)

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Student Diligence and Student Diligence Support: Predictors of Academic Success

Christon G. Arthur

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Student Diligence and Student Diligence Support: Predictors of Academic Success

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Introduction

Education systems usually interest themselves in the academic performance of their students. One of the major challenges facing school administrators is the need to provide instructional leadership. Equally string arguments have been advanced for placing most of the responsibility for learning on students (Glasser, 1986), on teaching and curricula (Glasser, 1992), and on both students and teachers (Ericson & Ellett, 1990).

Several theories have been posited in an attempt to explain student learning. One of the earliest of these theories is the Attribution Theory, which attributed success and failure to four main factors:

1. Native Ability
2. Effort
3. Luck
4. Task Difficulty (Heider, 1944; Hunter & Barker, 1987).

Of these factors, effort is the causal attribution that is completely under the students' direct control.

Bernard (1991) in an attempt to determine the contribution of effort to student success studied the relationship between diligence and academic performance. He defined diligence as an expression or reflection of effort expended by students toward a balance or holistic development of their mental, physical, social and spiritual dimensions of life.

Research Problem

Educational administrators face a great challenge to provide instructional leadership to students. Also, there is widespread concern that students are becoming increasingly unaffected and disengaged from school. Moreover, there is a public perception that schools and teachers do not have the capacity to prevent or overcome these problems (Hinds, Richardson, Ernest, Kishchuk, & Sproule, 1999). As a result, many educators have been seeking to find ways to academically engage students and thereby improve their academic performance. The purpose of this study was to examine ways in which students can become academically engaged and satisfied with their academic experience.

Theoretical Framework

The theoretical framework of this research is based on the philosophical belief that Education is a human partnership. Therefore, in order to academically engage students, it

takes more than a good school. It takes both a good school and a good home. It takes a collaborative effort between these two major institutions because family environment is strongly related to student academic achievement. Education has to be a home/school team effort. No matter how good they are, teachers cannot do the job of educating alone (Braxton, 1999; Deslanders & Royer, 1999; Redding, 1991; Rich, 1988, 1991a, 1991b, 1993, 1998; Robinson & Fine, 1994).

Review of Related Literature

The conceptual framework which allows for students to take responsibility for their learning and for parental and educator support for student learning is one which views education and learning as systemic or a whole, rather than fragmented parts. This learning framework encourages interrelationships (Senge, 1990). It is becoming very evident that efforts to improve students' academic achievement should involve all the key players in the education system: educators, parents (community), and the students themselves. The home and school should reinforce, not duplicate, one another in the quest of educating children. It is a cultural truism that one's experience in one institution within a society–the home, prepares one for experiences in another–school (Hess, 1986). Children who are good at managing their own learning activities have parents who cultivate such capabilities by modeling, guiding, and rewarding self-directedness (Martinez-Pons, 1996).

Hinds and his colleagues (1999) asked students to rate the factors which most strongly influence their attitudes toward school. Parental support was rated the highest. The more strongly students felt that their parents support, follow, and encourage their progress in school, the more positive were their attitudes toward school. Students who had strong academic support and encouragement from their parents liked school more, felt better about themselves in relation to school, had stronger beliefs that schooling would be valuable to them in their future lives, had fewer behavioral problems, and performed better academically.

In another study, American and Japanese students and their parents were asked to explain their own/children's achievement in mathematics. American parents and children indicated overwhelmingly that ability and schooling explained achievement, while the Japanese parents and students indicated that effort made the difference in achievement. On average, Japanese students performed better than American students on mathematics examinations (Stevenson et al., 1986).

A 1966 landmark report by the sociologist James Coleman and his colleagues, found that family environment was more strongly related to student achievement than any other factor, including school quality. This finding catalyzed most of the calls for more family support in their children's education. However, according to Rich (1988) and Goldberg (1999), many years later many families still do not provide the school-supportive activities at home that would help students improve their educational achievement.

Bernard and his colleagues (1996) made the excellent point that:

> A quality alliance between parents and educators in their support of students encompasses four critical functions: information exchange, joint problem-solving, school-based support, and home-based connections–the linkage which enables educators to work with parents/guardians in ways that will help them be effective in assisting their children at home. Of these four areas, the home-based connection is most pertinent. (p. 10)

According to Barton and Coley (1992):

> Three factors over which parents exercise authority- student absenteeism, variety of reading materials in the home, and excessive television watching - explain nearly 90% of the differences in eighth-grade mathematics test across 37 states and the District of Columbia on the National Assessment of Educational Progress (NEAP). Thus, controllable home factors account for almost all the differences in average student achievement across states. (p. 3)

Outside of the family, the school is the most influential institution in the lives of students. Educators' diligence-support, therefore, could play a pivotal role in shaping students' attitudes toward their academic pursuits. The ideal is for educators to provide students with the requisite support that can respond to their changing needs (Dowd, 1997; Korinek et al., 1999; Stainbeck & Stainbeck, 1994).

The task of creating classroom environments conducive to learning rests with educators. Educators who care for their students and believe strongly in their ability to promote student learning, create mastery experiences for their students. In contrast, teachers beset by self-doubts about their instructional efficacy construct classroom environments that are likely to undermine students' judgments of their abilities and their cognitive development (Bandura, 1997; Cohn & Rossmiller, 1987; Gibson & Dembo, 1984). In other words, the teacher is a modifiable determinant of students' academic performance.

All of these studies provide a basis for parental and educator support in children's education. The home environment sets the stage for children to not only learn but to want to learn. It should instill in students the desire to work hard and provide the time that is necessary for hard work to be done. There is no doubt that home and school partnerships are of vital importance for schools, children, and families (Epstein, 1991).

Research Methodology

A correlational study, using the survey method, was used to describe in quantitative terms the degree of the relationships between student diligence, student support systems, other related factors and student academic performance. Diligence scores were collected from

458 students, and diligence-support scores were collected from 358 parents and 34 educators in the public education system in Grenada. Of these, 310 students were matched to their parents in order to determine a direct relationship between parental diligence support and student diligence.

The Diligence Inventory contained 33 items. The current study used modified versions of Bernard's (1991) Diligence Inventory High-school Form (DI-HS), the Diligence Inventory Educator Form (DI-ED) and the Diligence Inventory Parent/Guardian Form (DI-PG) to examine the relationship between student diligence and student academic performance and to determine the impact of diligence-support on student diligence. Diligence was evaluated through the measurement of four scales. They were: Motivation, Concentration and Assimilation, Discipline, and Conformity and Responsibility. The range of options for each item was 1 – 5. Therefore, the total diligence ranged from 33 to 165.

In this study, *diligence* is defined as an expression or reflection of the effort expended toward a balanced or holistic development by the students in their mental, physical, social, and spiritual dimensions of life (Bernard, 1991). *Diligence-support* refers to the support children/students receive from parents and teachers that may help in the development of their diligence.

Research Findings

There is a significant correlation between student diligence and their academic performance ($r = .248$ $p < .01$). A student with high diligence would most likely tend to have high academic performance. In essence, 6% of differences in student performance can be explained by the level of their diligence. Furthermore, females ($M = 128.37$, $SD = 15.31$) tended to be more diligent than males ($M = 122.89$, $SD = 18.52$) ($p < .01$) and consequently, the diligence for females could explain 7% of the differences in their performance ($r = .258$ $p < .05$).

Even more strikingly, the results show that younger students, those who were 14 years old and younger, ($M = 136.62$, $SD = 15.42$) are more diligent than older students, 16 year olds ($M = 123.81$, $SD = 17.11$) and 17 years and older ($M = 124.65$, $SD = 15.54$) $p < .05$. For these younger students, the correlation between their level of diligence and their academic performance is $r = .427$ $p < .01$. This means these students level of diligence could explain 18% of the differences in their performance. There is a consistent trend that shows that as students become more diligent their academic performance tends to improve.

Since the level of student diligence is significantly related to their academic achievement, then one should ask, what are the factors which influence student diligence? Parental diligence-support is significantly correlated to student diligence ($r = .279$ $p < .001$). When parental diligence-support is high, students tend to be more diligent which result in higher student academic performance. As a matter of fact parental diligence support can explain

8% of a student's diligence.

Students who perceive that others expect them to succeed ($M = 128.29$, $SD = 15.70$) are more diligent than those who perceive that others are not expecting them to succeed ($M = 112.49$, $SD = 19.36$) $p < .001$. When students perceive high expectation from significant others they tend to be more diligent and are consequently high academic achievers.

Educators, who are significant others in the lives of students, provide more diligence-support ($M = 140.05$, $SD = 12.22$) to students than do parents ($M = 133.79$, $SD = 19.92$) $p < .001$. One can assume, therefore, that educator diligence-support has a similar influence of student academic as does parental diligence-support. By virtue of these results a model for explaining student academic achievement (see figure 1).

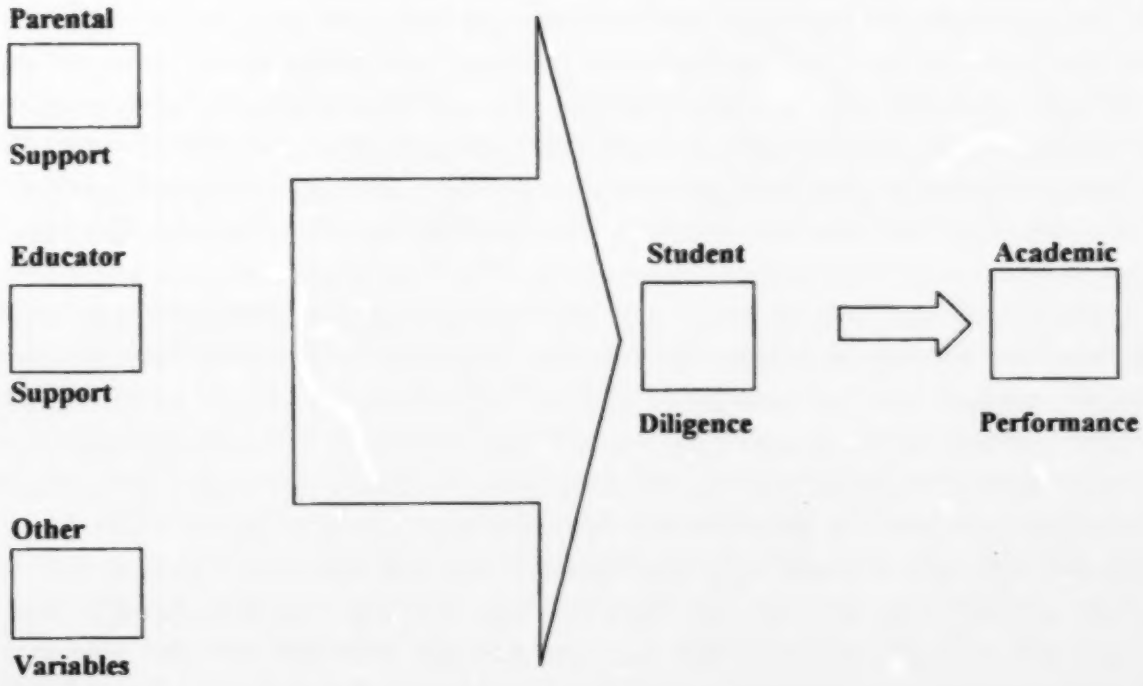

Figure 1: Model for explaining student academic achievement

Conclusions/Implications

Students should be encouraged to be more diligent because more diligence may be translated into improved academic performance. Parents, teachers and other significant

others in the lives of students should encourage them to:
Be motivated by striving to do their best; making sure that their assignments are done correctly; taking up academic challenges; turning in their assignments on time; working very hard to get good grades; etc.
Concentrate on school by making constructive use of leisure time; taking appropriate care to complete all assignments; reviewing the information covered in class; proofreading assignments before turning them in; etc.
Be disciplined by being prepared for exams; settling down to the tasks at hand; focusing on the tasks at hand; etc.
Exhibit conformity and responsibility by paying attention to what is happening in class; attending to homework before spending time with their friends; being organized for school; promptly obeying parents and teachers; etc.

This finding has implications for our education system. Increased parental diligence-support results in increased student diligence, which then translates to improved academic performance. Parents and more importantly, students have control over the academic performance of students.

This study has implications for our education system in providing intervention measures for student support and success. This information on the significant relationships between student academic performance and diligence-support may be used to inform our decisions on teacher training issues, parent/teacher collaboration issues, and the differences that students bring to the classroom.

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